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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,251	03/22/2001	Yihua Chang	11302-1040 (44040-251242)	6502
7590	10/18/2004		EXAMINER	
Andrew D. Stover Brinks, Hofer, Gilston & Lione NBC Tower-Suite 3600, 455 North Cityfront Plaza Dr Chicago, IL 60611-5599			DICUS, TAMRA	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/815,251

Applicant(s)

CHANG ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-7, 12-17, 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11, 18, 19 and 22-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

The rejections of the prior Office action are withdrawn due to Applicant's arguments.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 8-11, 18-19, and 21-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-34 of U.S.

Patent Application Publication No. 2003/0027470 A1 and claims 1-34 of US Patent Application Publication No. 2003/0055146 A1.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Although the conflicting claims are not identical, they are not patentably distinct from each other because while all applications claim a triggerable cationic polymer containing quaternary ammonium groups, the instant claims of Application 09/815,251 disclose language "wherein said substrate is not substantially dispersible in a wetting solution containing at least about 0.5 weight percent of an insolubilizing agent and said substrate is substantially dispersible in tap water", where as US Pub '470 claim a fibrous material (equivalent to substrate) being

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wetted by a wetting solution containing a sufficient amount of an insolubilizing agent” (see claim 20 of US Pub ‘470). The Examiner interprets the wetting solution containing insolubilizing agent in “a sufficient amount” of US Pub ‘470 to be equivalent in meaning to “at least about 0.5 weight percent” or “at least about 2 weight percent of salt” in the instant application because the exact same triggerable cationic polymer is claimed. Claims of US Pub ‘146 claim a fibrous material that is “capable of forming a complex anion” and the triggerable polymer, while it does not claim the fibrous material is substantially dispersible in tap water and not in a wetting solution containing at least about 0.5 weight percent, one would inherently expect the polymer to perform as such in said wetting solution because the exact same polymeric binder composition is claimed. (See claims 22 and 34 of US Pub ‘146). All of the properties that happen to the substrate once submerged in various types of wetting solutions would be inherent as the same ingredients and substrate is claimed.

4. Note that US Pub ‘470 (application 09/815,169) has received an issue fee but has not yet been assigned a patent number.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 8-11, 18-19, and 22-38 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/27186 to Bjorkquist et al.

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7. Bjorkquist discloses flushable fiber structures having high in-use wet tensile strengths and a wet strength decay rate suitable for flushability, equivalent to triggerable functionality. The structures comprise fibers and a binder material wherein the binder comprises a polymer and a salt (page 3, 3rd full paragraph and page 16, 1st full paragraph). A preferred class of polymers includes those which are acrylamide copolymers of acryloxyethyldialkylamines which are cationic at neutral pH (page 5, 2nd full paragraph, patented claim 11, and the paragraph bridging pages 5-6) (instant claims 8-11, 18-19, 22-23). The useful salts include those of divalent cations (Mg⁺⁺, Ca⁺⁺). See page 6, 2nd full paragraph. Page 5 and claim 11 teach the use of cationic monomers in the synthesis of the binder polymerization, teaching the binder polymers containing an amino group, e.g. R3 is $-O-(CH_2-)Z-N(R_6)(R_7)$ and that at neutral pH, the polymers would have a positive charge (instant claim 23). That the substrates are dispersible in various types of water is drawn to intended use and is not germane to patentability. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).). The properties such as wet tensile strength when soaked in water for various lengths of time (instant claims 36-39) and how the fabric reacts when dispersed in various water solutions (instant claims 23-35) are inherent and would be expected to perform as such because the same materials and fabric are used. Further to claims 24-39, it appears that the multivalent ions are not a part of the final product. If Applicant intends to further limit the claim, the Examiner suggests including further limiting language to indicate so. The concentration of ions is in the testing solution, not the final product and are measurement properties directly resulting from placing the final product in the testing

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solution. Therefore, as instantly claimed, it would be reasonable to presume the limitations are inherent. Support for said presumption is found in the use of similar materials, i.e. the cationic polymer binder solution and the same process, i.e. the application of the ingredients to the fabric. Therefore, the burden of proof is upon the Applicant to prove otherwise.

Response to Arguments

All arguments are moot in view of grounds for the new rejection.

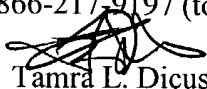
Prior art of interest: USPN 6358365 to Zhang et al.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tamra L. Dicus
Examiner
Art Unit 1774


RENA DYE
SUPERVISORY PATENT EXAMINER

10/12/04

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